

Common questions raised by managers through willows workshops, Sept 06 - Feb 07.

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The following questions were asked by participants who attended one of the 27 willows workshops conducted in willow affected regions across Australia. The questions that may warrant further investigation are highlighted in blue and questions are listed in no particular order.

Biology/ecology of willows

What makes willows suit northern hemisphere rivers and not Australian ones?

What makes willows weedy in southern hemisphere and not in northern hemisphere?

Are all willows introduced? Are any native to Australia?

Are there any ecological benefits of willows?

Can we use willows as quick colonisers ie. the Peter Andrews way to improve degraded water-ways?

Are willow leaves toxic?

What is the feed value of willows? Does this vary according to taxa?

How long do willows last for and how can you determine the age of a willow?

Water use of willows

Does water use of willows vary according to taxa?

How does willow water use compare to household water use?

Spread & hybridisation of willows

Can all willows spread vegetatively?

How big does the material need to be in order to take root?

How long is willow seed viable for?

Does seed viability vary with different taxa?

What conditions are needed for seed germination?

How far can the pollen and seed of different willows spread?

How far can willow seed spread by wind or water?

How is willow seed dispersed?

To what extent would ants and other burying insects spread the seed of willows?

How far can pollen spread?

How close do males and females need to be in order to produce viable seed?

Will every catkin produce viable seed if male and females are present?

What is the potential of S. babylonica hybridising and spreading by seed?

Can hermaphrodite willows self-fertilise?

Are willows spread by machinery?

Can poplars hybridise with willows?

Willow Identification

Do we need to worry about the exempt species eg. S. babylonica?

How easy is it to ID hybrids?

Are there any contacts we can go to for assistance with willow ID in the field?

Do you have any references for willow ID for species that are not in the guide?

Management Techniques

What is the best chemical treatment in terms of effectiveness?

How many years follow up is needed post willow removal?

How long does it take a willow to rot away after it has been killed?

Is the control method used species-specific?

How do you nominate the time between drill and fill and removing the willow?

How deep do you need to cut with the drill and fill method?

In what situations do you use drill and fill method and leave the tree standing to rot?

How do you determine which willows to leave and which to remove?

How close do you drill the holes or cut for drill and fill and frill and fill methods?

Do you have to cut all the way around the stem of the willow?

What is the best use of the willow wood after removal?

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Management Techniques continued...

Can you foliar spray willows? And in what situations?

What is the best time of the year to kill willows?

Most willow removal has been done when rivers are in low flow, what will happen when rivers return to high flows?

Sawfly

Is it a good thing or a bad thing?

Can we spread sawfly?

Where can we get some sawfly?

Can sawfly kill trees?

Have trees died from sawfly attack in Australia yet?

To what extent will sawfly attack the same species in different regions? What causes the variation?

How does sawfly spread?

How many eggs does a sawfly lay?

How closely related are the eucalypt sawfly to the willow sawfly?

Does sawfly attack native tree species?

Will trees develop a resistance to sawfly over time?

What role will sawfly play in pollen dispersal?

Does anything attack willow sawfly?

Will sawfly impact on the effectiveness of management techniques?

What is the potential for willow sawfly to prevent the spread of willows &/or reduce canopy cover allowing revegetation beneath them until they die, or can be removed?

General/ Communications

How do you explain the impacts of willows to community? What are the top four?

Why do rabbis have to bring willows from overseas for the Sukkos festival? Why can't they use the willows here?

Re-vegetation

Which are the best native species to plant after removal to stabilise the banks?

Is it possible to begin re-veg before the willows are removed?

How does re-veg go in flooding events post willow removal?

Are there before and after studies available of improvements in river health eg. Increase in aquatic and terrestrial species post willow removal and re-veg?

Willows have a dense root mat and trap nutrients, what can we use instead of willows to absorb nutrient runoff from dairy farms?

Mapping

Can aerial photography be used for mapping willows?

Can satellite technology and remote sensing be used for mapping willows?